



Toward a Future Mississippi Drive



Re-envisioning Mississippi Drive

“The Pearl of the Mississippi”

Muscatine, Iowa’s history of settlement and innovation is largely shaped by the Mississippi River, as riverfronts were the shipping and industrial birthplace of many cities. In 1887 a German immigrant came to Muscatine with a quest to make buttons, and found that the freshwater mussel shells from the Mississippi River made for pearly and fashionable buttons. A button industry was born. Muscatine became home to the world’s largest pearl button manufacturer, known as “Pearl Button Capital of the World.” The legacy of the button industry played an important part to the City’s formation, along with early lumber and woodworking industries. The influence of major industries at the turn of the century and the development of the railroad largely shaped Muscatine into what it is today, a walk through downtown and the close-in neighborhoods reveals the pride of Muscatine’s past with beautiful Victorian buildings and homes. Today, Muscatine continues to attract new business including a new boutique hotel, soon to be developed along Mississippi Drive.

Mississippi Drive, a former state highway (Hwy 92/U.S. 61), runs through the heart of Muscatine, dividing the downtown from one of the city’s main pearls [assets]: the riverfront. Like many communities across the U.S., the last sixty years of auto-centric transportation planning have caused Muscatine to turn its backs on its riverfront. To add to the complexity, the railroad further divides Muscatine’s downtown and riverfront.

The good news: In 2014, the Iowa Department of Transportation transferred jurisdiction of the Mississippi Drive to the City of Muscatine and removed its designation as a portion of State Highway 92. In addition, the railroad will be raising their tracks a foot due to the river flooding patterns, which will cause a significant grade change at the three railroad track

crossings. The City has positioned itself to leverage both of these changes as opportunities to re-envision and transform Mississippi Drive and the riverfront as a multi-use public place, a golden opportunity for Muscatine to redefine itself.

On October 31, 2014, sponsored by Wellmark and Healthways | Blue Zones Project, 30 enthusiastic City staff, business and property owners, health practitioners, regional planners and resident leaders came together to begin to re-envision Mississippi Drive. Led by Dan Burden, national walkability expert, and Samantha Thomas of Blue Zones, LLC the group walked the corridor, re-imagining and identifying together the opportunities to transform Mississippi Drive into a street that honors and reconnects people and place. “It is time to take Muscatine, which hasn’t changed much in the last 25 years, and move it into the next generation,” proclaimed one participant.

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- walking audit participant

There are opportunities for improvement. Today, Mississippi Drive is wider than necessary, has higher speeds than posted, and is dominated by sprawling parking lots. It has four travel lanes and a fifth lane for turns; it is tasked to move only 12,000 vehicles per day. For perspective one travel lane uninterrupted can carry 18,000 vehicles a day. Mississippi Drive should undergo a ‘road diet,’ where travel lanes are removed and converted to on-street parking with a ‘transition’ lane, sidewalks, and a landscaped median. Many ‘aha’ moments occurred during the walk, including new ways



to re-imagine on-street parking with head-out, or reverse-in, angled parking. On-street parking frees up land that can be redeveloped with the proper uses to support the community. In addition, on-street parking belongs on center city streets, serving as a buffer between pedestrians and moving cars, a natural traffic calming tool. But the primary reason for maximizing parking on street is to help civilize streets that were over-built for speed.

The railroad only allows three crossings points to access the river—two are open to all modes of transportation at Cedar Street and Iowa Avenue and the third at Sycamore Street is pedestrian/bike only. These are key intersections where new tools, such as roundabouts and raised intersections, should be applied to enhance the safety and efficiently for all roadway users while optimizing public access to the riverfront.

Transforming Mississippi Drive will serve as a catalyst for economic development, community health, well-being, and overall livability. To further illustrate the street treatments and tools a photo-vision for Mississippi Drive was created. The following pages showcase these ideas. The photo-vision is a conceptual image meant to be a starting point, a tool to help the community continue the momentum and further build community engagement. Mississippi Drive is an immense canvas that now needs an engaged group of citizens to take part in the next stage of community visioning to collectively select the colors, tones and textures that will accent the history, beauty and charm of Muscatine. Every street transformation takes an informed group of citizens to promote and protect a shared vision. As Sarah, a resident, said:

“As the process continues, we need to think bold, think big; this is an opportunity for everyone—it will benefit all of Muscatine.”

Existing Conditions Summary: Mississippi Drive

“ We have an opportunity to connect our downtown to our riverfront with Mississippi Drive. I’d like to see us shrink the lanes, add more on-street parking, and green space to make this corridor a key focal point and gathering place for the community.

- Gregg Mandsager,
City Manager



NEED FOR ON-STREET PARKING

Off-street parking takes up three times more space than on-street parking. On-street parking visually narrows streets and brings down traffic speeds, while providing the most sustainable and affordable parking.

NEED FOR SAFER, MORE EFFICIENT INTERSECTION TREATMENTS

Mississippi Drive and Cedar Street create a large and complex intersection due to the multiple turning movements, railroad crossing, and the long crossing distances—72 feet—for a person on foot.

STREET IS FAT, NEED FOR RIGHT-SIZED TRAVEL LANES

Mississippi Drive is overbuilt with too many travel lanes for the amount of vehicle traffic that exists today and in the future. The corridor lacks visual cues, such as: trees, buffered sidewalks, bicycle lanes, and on-street parking, create higher design speeds than posted speeds.

NEED FOR A TERMINATING VISTA, AND TO OPTIMIZE PUBLIC ACCESS

Terminating vistas anchor destinations and establish a sense of place within parks. The pump house is a blank canvas, and currently does not help define the riverfront as a destination.

NEED TO GREEN THE RIVERFRONT AND SUPPORT ACTIVE TRANSPORTATION

Today, there is an overabundance of space dedicated to the automobile. Walking and biking are important parts of the transportation mix—unimpeded by cars or parking lots, people are more at ease, and the full breadth of riverfront activity can flourish.

A Photo-Vision for Mississippi Drive: *The conceptual photo-vision illustrates how new street treatments can be applied to transform Mississippi Drive into a corridor that honors the community's past, present and future.*



Mississippi Drive goes on a 'road diet.' The street is narrowed from four travel lanes to two travel lanes. The additional space is used for on-street parking—parallel parking and head-out angled parking. Colorized 'transition' lanes allow for people to park and un-park with ease, in addition to proving a space for bicyclists. The roundabout at Cedar Street removes the major safety, capacity, noise, access and mobility challenges that presently exist. The intersection at Cedar Street then becomes well-managed, improving the flow of traffic, while bringing all speeds under control. The roundabout will move 30% more traffic, with a 90% reduction in personal injury crashes. Properly placed crosswalks are setback one car length from the circulating lanes. The roundabout's coral truck

apron accommodates oversized trucks, emergency vehicles and snow plows. The intersection at Sycamore Street becomes a gateway that connects people to the riverfront with a raised intersection. The art sculpture and mural on the pump house draw people to the new greened riverwalk. Placemaking is improved through these beautiful intersection designs, setting the stage for new buildings and businesses that honor the street, downtown and river. Just as significant, fixing these intersections and greening the street (landscaped median and street trees) will add great value to all land and enhance the economic vitality, walkability, and livability of the downtown.

Benefits of Illustrated Street Treatments:

Road Diet: A road diet takes an overly wide road that has too many vehicle travel lanes to be safe and removes lanes. In this case, converting lanes into sidewalks, on-street parking and a landscaped median. Road diets reduce crossing distances for people on foot improving safety and efficiency for all street users. In addition, road diets increase and enhance business activity by reducing traffic speeds and creating place. Reducing traffic speeds helps motorists notice the shops, eateries and businesses they're driving alongside. A more human-scale place attracts and accommodates people walking and bicycling, who tend to spend more money at local businesses than people driving do.

On-Street Parking: Head-out, or reverse-in, angled parking is the safest form of on-street parking, while maximizing parking space. It offers multiple benefits, including creating a sight line between the driver and other road users, such as bicyclists, when un-parking. Additionally, for drivers with young children, seniors or others who need extra help, the open doors direct passengers to the safety of the sidewalk, not into traffic. Getting into a head-out angled parking spot is simple, especially with the 'transition' lane—a driver signals their intention, slows, pulls into the transition lane past the spot and then backs into it, which is equivalent to making only the first maneuver of parallel parking

Raised Intersections: A raised intersection covers the entire intersection. They can be expensive, due to their potential to interrupt drainage. However, their are many advantages, including maintaining speeds to 15-20 mph 24 hours a day.